SMITHSONIAN MISCELLANEOUS COLLECTIONS.

177

CHECK LIST

OF THE

INVERTEBRATE FOSSILS

OF

NORTH AMERICA.

CRETACEOUS AND JURASSIC.

BY

F. B. MEEK.

WASHINGTON:
SMITHSONIAN INSTITUTION.
APRIL, 1864.

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The following Lists of the described species of Invertebrate Fossils of North America have been prepared at the request of the Institution for the purpose of facilitating the labelling of the collections and the distribution of duplicate specimens.

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JOSEPH HENRY,
Secretary S. I.

Smithsonian Institution,
Washington, April, 1864.

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CRETACEOUS FORMATION.

BY

F. B. MEEK.

SUBKINGDOM **PROTOZOA.**

CLASS **AMORPHOZOA.**

1. **Eudea ? dichotoma,** *Gabb.*	N. J.

CLASS **RHIZOPODA.**

Order **FORAMINIFERA.**

Lagenidæ.

2. **Phonemus (Cristellaria) rotulatus** *D'Orb. ?*	N. J.
3. **Phonemus (Flabellina) ouneatus,** (*Morton*) *Meek.*	N. J.
4. **Phonemus (Flabellina) sagittarius,** (*Lea*) *Meek.*	N. J.
5. **Phonemus (Dentalina) pulcher,** *Gabb.*	N. J.

Globigerinidæ.

6. **Rotalia lentioulina,**	Dak.; Neb.
7. **Rotalia senaria,**	Dak.; Neb.
8. **Tinoporus (Orbitolina) texanus** (*Roemer*) *Meek.*	Tex.
9. **Textularia americana,** *Ehrenberg.*	
10. **Textularia missouriensis,** *Ehrenberg.*	Dak.; Neb.
11. **Textularia globulosa,** *Ehrenberg.*	Dak.; Neb.
12. **Textularia phyllodes,** (*Ehrenberg*) *Meek.*	Dak.; Neb.

SUBKINGDOM RADIATA.

CLASS POLYPI.

Order ACTINARIA.

Fungidæ.

13.	**Micrabacia americana**, *Meek & Hayden.*	Neb.

Asteridæ.

14.	**Trochosmilia conoidea**, *Gabb & Horn.*	N. J.
15.	**Trochosmilia ? texana**, *Conr.*	Tex.
16.	**Montlivaltia atlantica**, (*Morton*) *Lonsdale.*	N. J.
17.	**Astrocœnia guadaloupae**, *Roemer.*	Tex.

Turbinolidæ.

18.	**Platytrochus speciosus**, *Gabb & Horn.*	Ten.
19.	**Turbinolia [?] inauris**, *Morton.*	N. J. ; Ala.
20.	**Flabellum striatum**, *Gabb & Horn.*	Ala.

Order ALCYONARIA.

Gorgonidæ.

21.	**? Websteria cretacea**, *Meek & Hayden.*	Dak.

CLASS ECHINODERMATA.

Order ECHINOIDEA.

Cidaridæ.

22.	**Cidaris Galeottii**, *Desor.*	Mex.
23.	**Cidaris hemigranosus**, *Shumard.*	Tex.
24.	**Cidaris [?] pustulosus**, *Galeotti.*	Mex.
25.	**Pseudodiadema diatretum**, (*Morton*) *Desor.*	N. J.
26.	**Pseudodiadema texanum**, (*Roemer*) *Desor.*	Tex.

Galeriidæ.

27.	**Pyrina Parryi**, *Hall.*	Tex.
28.	**Holectipus planatus**, *Roemer.*	Tex.
29.	**Holectipus simplex**, *Shumard.*	Tex.

Cassidulidæ.

30.	**Nucleolites crucifer**, *Morton.*	N. J.
31.	**Cassidulus æquoreus**, *Morton.*	Ala.
32.	**Cassidulus florealis**, (*Morton*) *Gabb.*	Del.
33.	**Pygurus geometricus**, (*Morton*) *Desor.*	Del.

Spatangidæ.

34. **Holaster simplex,** *Shumard.*	Ind. T.
35. **Holaster comanchesi,** *Marcou.*	Tex.
36. **Toxaster elegans,** *Shumard.*	Ind. T.
37. **Toxaster texanus,** *Roemer.*	Tex.
38. **Hemiaster? Humphreysanus,** *Meek & Hayden.*	Id.
39. **Hemiaster? stella,** (*Morton*) *Desor.*	Ala.
40. **Hemiaster [?] parastatus,** (*Morton*) *Desor.*	Ala.
41. **Hemiaster texanus,** *Roemer.*	Tex.

Subkingdom MOLLUSCA.

Class POLYZOA.

Escharidæ.

42. **Eschara digitata,** *Morton.*	N. J.
43. **Cellepora prolifera,** *Gabb & Horn.*	N. J.
44. **Cellepora exserta,** *Gabb & Horn.*	N. J.
45. **Cellepora Janewayi,** *Gabb & Horn.*	Miss.
46. **Cellepora pumila,** *Gabb & Horn.*	N. J.
47. **Reptocelleporia aspera,** *Gabb & Horn.*	N. J.
48. **Escharifora typica,** *Gabb & Horn.*	N. J.

Escharinellidæ.

49. **Escharinella muralis,** *Gabb & Horn.*	N. J.

Porinidæ.

50. **Reptoporina carinata,** *Gabb & Horn.*	N. J.

Escharellinidæ.

51. **Escharellina prolifera,** *Gabb & Horn.*	N. J.
52. **Escharipora distans,** *Gabb & Horn.*	N. J.
53. **Escharipora Abbottii,** *Gabb & Horn.*	N. J.
54. **Escharipora immersa,** *Gabb & Horn.*	N. J.
55. **Pliophlœa sagena,** (*Morton*) *Gabb & Horn.*	N. J.
56. **Raptascharipora marginata,** *Gabb & Horn.*	N. J.

Flustrellaridæ.

57. **Biflustra torta,** *Gabb & Horn.*	N. J.
58. **Biflustra disjuncta,** *Gabb & Horn.*	N. J.
59. **Pyripora irregularis,** *Gabb & Horn.*	N. J.
60. **Membranipora abortiva,** *Gabb & Horn.*	N. J.
61. **Membranipora perampla,** *Gabb & Horn.*	N. J.
62. **Membranipora plebia,** *Gabb & Horn.*	N. J.

Flustrellidæ.

63. **Flustrella capistrata,** *Gabb & Horn.* N. J.
64. **Flustrella cylindrica,** *Gabb & Horn.* N. J.
65. **Reptoflustrella [?] heteropora,** *Gabb & Horn.* N. J.
66. **Reptoflustrella tubulata,** *Gabb & Horn.* ?

Eleidæ.

67. **Retelea ovalis,** *Gabb & Horn.* N. J.

Fascigeridæ.

68. **Filifascigera megaera,** (*Lonsdale*) *D'Orb.* N. J.

Fascioporidæ.

69. **Fasciopora americana,** *Gabb & Horn.* N. J.

Tubigeridæ.

70. **Spiropora calamus,** *Gabb & Horn.* N. J.
71. **Idmonea contortilis,** *Lonsdale.* N. J.

Sparasidæ.

72. **Entalophora quadrangularis,** *Gabb & Horn.* N. J.
73. **Entalophora Conradii,** *Gabb & Horn.* N. J.
74. **Diastopora lineata,** *Gabb & Horn.* N. J.
75. **Alecto regularis,** *Gabb & Horn.* N. J.

Crisinidæ.

76. **Reticulipora sagena,** *Gabb & Horn.* N. J.
77. **Reticulipora dichotoma,** *Gabb & Horn.* N. J.
78. **Bicrisina Abbottii,** *Gabb & Horn.* N. J.

Cavidæ.

79. **Reptomulticava cepularis,** *Gabb & Horn.* N. J.

Crescisidæ.

80. **Crescis labiata,** *Gabb & Horn.* N. J.
81. **Multicresis parvicella,** *Gabb & Horn.* N. J.

CLASS BRACHIOPODA.

Lingulidæ.

82. **Lingula nitida,** *Meek & Hayden.* Id.
83. **Lingula subspatulata,** *Hall & Meek.* Dak.

Terebratulidæ.

84. **Terebratula guadaloupae,** *Roemer.*	Tex.
85*a*. **Terebratula Harlani,** *Say.*	N. J.
86. **Terebratula leonensis,** *Conr.*	Tex.
87. **Terebratula wacoensis,** *Roemer.*	Tex.
88. **Terebratulina floridana,** (*Morton*) *D'Orb.*	Ala.
89. **Terebratulina Halliana,** *Gabb.*	N. J.
90. **Terebratella plicata,** (*Say*) *D'Orb.*	N. J.
91. **Terebratella Vanuxemi,** (*Lyell & Forbes*) *D'Orb.*	N. J.

? RUDISTA.

Radiolitidæ.

92. **Caprotina Romerii,** *Gabb.*	Tex.
93. **Caprotina [?] senseni,** (*Conr.*) *Gabb.*	Ark.
94. **Caprotina [?] subtriquetra,** (*Roemer*) *Gabb.*	Tex.
95. **Caprotina texana,** *Roemer.*	Tex.
96. **Radiolites Aimesii,** *Tuomey.*	Ala.
97. **Radiolites Austinensis,** *Roemer.*	Tex.; Ala.; Miss.
98. **Radiolites lamellosus,** *Tuomey.*	Ala.
99. **Radiolites Ormondii,** *Tuomey.*	Ala.
100. **Radiolites Tuomeyanus,** *Gabb.*	Ala.

Caprinidæ.

101. **Caprina crassifibra,** *Roemer.*	Tex.
102. **Caprina guadaloupae,** *Roemer.*	Tex.
103. **Caprina occidentalis,** *Conr.*	Tex.
104. **Caprina planata,** *Conr.*	Tex.
105. **Caprina quadrata,** *Conr.*	Tex.
106. **Ichthyosarcolithus coraloides,** (*Hall & Meek*) *Gabb.*	Dak.
107. **Ichthyosarcolithus cornutus,** *Tuomey.*	Ala.
108. **Ichthyosarcolithus loricatus,** *Tuomey.*	Ala.
109. **Ichthyosarcolithus quadrangularis,** *Tuomey.*	Ala.
110. **Hippurites texanus,** *Roemer.*	Tex.

CLASS LAMELLIBRANCHIATA.

Ostreidæ.

111. **Ostrea anomiæformis,** *Roemer.*	Tex.
112. **Ostrea acuticostata,** *Galeotti.*	Mex.
113. **Ostrea bella,** *Conr.*	Tex.
114. **Ostrea belliplicata,** *Shumard.*	Tex.
115. **Ostrea carinata,** *Lam. ?*	Tex.
116. **Ostrea confragosa,** *Conr.*	Miss.

117. **Ostrea congesta,** *Conr.*	Dak.; Neb.; Kans.; Ark.
118. **Ostrea crenulata,** *Tuomey.*	Ala.
119. **Ostrea crenulimargo,** *Roemer.*	Tex.
120. **Ostrea crenulimarginata,** *Gabb.*	Ten.
121. **Ostrea denticulifera,** *Conr.*	Ala.; Miss.; Ten.
122. **Ostrea Gabbana,** *Meek & Hayden.*	Id.
123. **Ostrea glabra,** *Meek & Hayden.*	Idah.; Utah.
124. **Ostrea larva,** *Lam.*	N. J.; Del.; Ala.; Miss., &c.
125. **Ostrea lugubris,** *Conr.*	Tex.
126. **Ostrea Lyoni,** *Shumard.*	Tex.
127. **Ostrea multilirata,** *Conr.*	Tex.
128. **Ostrea Owenana,** *Shumard.*	Tex.
129. **Ostrea panda,** *Morton.*	N. J.; Del.; Ala.
130. **Ostrea pandæformis,** *Gabb.*	Miss.
131. **Ostrea patina,** *Meek & Hayden.*	Id.
132. **Ostrea peculiaris,** *Conr.*	Ala.
133. **Ostrea planovata,** *Shumard.*	Tex.
134. **Ostrea plumosa,** *Morton.*	N. J.; Ala.; Miss.; Ten.
135. **Ostrea quadriplicata,** *Shumard.*	Tex.
136. **Ostrea robusta,** *Conr.*	Tex.
137. **Ostrea subovata,** *Shumard.*	Tex.; Ind. T.
138. **Ostrea subsimilis,** *D'Orb.*	Mex.
139. **Ostrea subspatulata,** *Forbes.*	N. J.; Ala.; Miss.; Tex.
140. **Ostrea tecticosta,** *Gabb.*	N. J.; Ten.
141. **Ostrea translucida,** *Meek & Hayden.*	Dak.
142. **Ostrea vellicata,** *Conr.*	Tex.
143. **Gryphæa navia,** *Conr.*	Tex.; N. Mex., &c.
144. **Gryphæa Pitcheri,** *Morton.*	Ark.; Tex.; Ind. T.; N. Mex.; Ariz.
145. **Gryphæa thirsæ,** *Gabb.*	Ala.
146. **Gryphæa vesicularis**(*Lk.*)*Sby.*	N. J.; Del.; Ala.; Miss.; Tex.; Dak.?
147. **Exogyra arietina,** *Roemer.*	Tex.
148. **Exogyra costata,** *Say.*	N. J.; Del.; Ala.; Miss.; Tex., &c.
149. **Exogyra fimbriata,** *Conr.*	Tex.
150. **Exogyra fragosa,** *Conr.*	Tex.
151. **Exogyra interrupta,** *Conr.*	Miss.
152. **Exogyra læviuscula,** *Roemer.*	Tex.
153. **Exogyra lateralis,** (*Neilson*) *Gabb.*	N. J.
154. **Exogyra Matheroniana,** (*D'Orb.?*) *Conr.*	Tex.

Anomiidæ.

155. **Placunomia lineata,** *Conr.*	Ten.
156. **Placunomia Saffordi,** *Conr.*	Ten.
157. **Placunomia scabra,** (*Morton*) *Gabb.*	N. J.
158. **Anomia argentaria,** *Morton.*	N. J.; Ala.; Miss.; Ten.
159. **Anomia Flemingi,** *Meek.*	Br. Am.
160. **Anomia obliqua,** *Meek & Hayden.*	Dak.

161. **Anomia sellæformis**, *Conr.*	Miss.
162. **Anomia subtrigonalis**, *Meek & Hayden.*	Dak.
163. **Anomia tellinoides**, *Morton.*	N. J.; Ala.; Miss.

Spondylidæ.

164. **Plicatula incongrua**, *Conr.*	Tex.
165. **Plicatula Saffordi**, *Conr.*	Ten.
166. **Plicatula tetrica**, *Conr.*	Ten.
167. **Plicatula urticosa**, *Morton.*	N. J.
168. **Spondylus echinatus**, (*Morton*) *Meek.*	N. J.
169. **Spondylus gregalis**, (*Morton*) *D'Orb.*	N. J.
170. **Spondylus guadalupae**, *Roemer.*	Tex.

Limidæ.

171. **Lima acutilineata**, (*Conr.*) *Meek.*	N. J.; Ala.; Ten.
172. **Lima crenulicosta**, *Roemer.*	Tex.; Ala.; Miss.; Ten.
173. **Lima denticulata**, (*Gabb*) *Meek.*	Ala.
174 **Lima leonensis**, *Conr.*	Tex.
175. **Lima pelagica**, (*Morton*) *Meek.*	N. J.
176. **Lima reticulata**, *Lyell & Forbes.*	N. J.; Ten.; Ala.
177. **Lima squarrosa**, (*Gabb*) *Meek.*	Ala.
178. **Lima wacoensis**, *Roemer.*	Tex.

Pectenidæ.

179. **Neithea duplicosta**, (*Roemer*) *Gabb.*	Tex.
180. **Neithea Mortoni**, (*D'Orb.*) *Gabb.*	N. J.; Ten.; Ala.; Miss.
181. **Neithea occidentalis**, *Conr.*	Tex.
182. **Neithea quadricostata**, (*Sowb.*) *Gabb.*	Tex.
183. **Neithea quinquenaria**, (*Conr.*) *Gabb.*	Del.
184. **Neithea texana**, (*Roemer*) *Conr.*	Tex.
185. **Neithea Wrightii**, (*Shumard*) *Gabb.*	Tex.
186. **Pecten argillensis**, *Conr.*	Ala.
187. **Pecten burlingtonensis**, *Gabb.*	N. J.; (Ala.?)
188. **Pecten craticula**, *Morton.*	N. J.
189. **Pecten mississippiensis**, *Conr.*	Miss.
190. **Pecten nebrascensis**, *Meek & Hayden.*	Id.
191. **Pecten Neilsoni**, *Goldfuss* (not *Desh.*)	Tex.
192. **Pecten tenuitesta**, *Gabb.*	N. J.
193. **Pecten texanus**, *Gabb.*	Tex.
194. **Pecten venustus**, *Morton.*	N. J.
195. **Sincyclonema rigida**, (*Hall & Meek*) *Meek.*	Dak.
196. **Sincyclonema? simplicus**, (*Conr.*) *Meek.*	N. J.; Ala.; Miss.; Ten.

Nuculanidæ.

197. **Yoldia Evansi**, *Meek & Hayden.*	Id.; Dak.
198. **Yoldia scitula**, *Meek & Hayden.*	Id.; Dak.

199. **Yoldia subnasuta,** (*Hall & Meek*) *M. & H.*	Dak.
200. **Yoldia ventricosa,** (*Hall & Meek*) *M. & H.*	Dak.
201. **Nuculana bisulcata,** (*Meek & Hayden*) *Meek.*	Id.
202. **Nuculana longifrons,** (*Conr.*) *Meek.*	Ala.; Miss.; N. J.
203. **Nuculana pinnæformis,** (*Gabb*) *Meek.*	N. J.
204. **Nuculana protexta,** (*Gabb*) *Meek.*	N. J.; Ten.
205. **Nuculana Slackiana,** (*Gabb*) *Meek.*	N. J.
206. **Nuculana subangulata,** (*Gabb*) *Meek.*	N. J.
207. **Neilo Hindi,** *Meek.*	Br. Am.

Nuculidæ.

208. **Nucula cancellata,** *Meek & Hayden.*	Dak.
209. **Nucula bellastriata,** *Shumard.*	Tex.
210. **Nucula cuneiformis,** *Conr.*	Miss.
211. **Nucula distorta,** *Gabb.*	Tenn.; Miss.
212. **Nucula ? equilateralis,** *Meek & Hayden.*	Dak.
213. **Nucula Haydeni,** *Shumard.*	Tex.
214. **Nucula obsoletistriata,** *Meek & Hayden.*	Dak.
215. **Nucula percrassa,** *Conr.*	Ala.; Miss.
216. **Nucula perequalis,** *Conr.*	Ala.; Miss.; N. J.; Ten.
217. **Nucula planimarginata,** *Meek & Hayden.*	Dak.
218. **Nucula serrata,** *Shumard.*	Tex.
219. **Nucula subplana,** *Meek & Hayden.*	Id.
220. **Nucula Traskana,** *Meek.*	Vanc. I.

Arcidæ.

221. **Limopsis parvula,** *Meek & Hayden.*	Id.
222. **Limopsis striato-punctata,** *Evans & Shumard.*	Dak.
223. **Axinæa hamula,** (*Morton*) *Gabb.*	N. J.; Ala.
224. **Axinæa siouxensis,** (*Hall & Meek*) *M. & H.*	Iowa.
225. **Axinæa subventricosa,** *Meek & Hayden.*	Dak.
226. **Axinæa rotundata,** *Gabb.*	N. J.
227. **Axinæa subaustralis,** (*D'Orb.*) *Gabb.*	Ala.; N. J.
228. **Cucullæa ? equilateralis,** *Meek.*	Vanc. I.
229. **Cucullæa antrosa,** *Morton.*	N. J.; Del.; Ala.
230. **Cucullæa exigua,** *Meek & Hayden.*	Id.
231. **Cucullæa macouensis,** *Conr.*	Ala.
232. **Cucullæa nebrascensis,** *Owen.*	Dak.
233. **Cucullæa Shumardi,** *Meek & Hayden.*	Dak.
234. **Cucullæa terminalis,** *Conr.*	Tex.
235. **Cucullæa tippana,** *Conr.*	Ala.
236. **Cucullæa transversalis,** *Gabb.*	N. J.
237. **Cucullæa ungula,** *Tuomey.*	Ala.
238. **Cucullæa vulgaris,** *Morton.*	N. J.; Del.
239. **Arca altirostrata,** *Gabb.*	N. J.
240. **Arca Proutiana,** *Shumard.*	Tex.

241.	**Arca quiudecemradiata**, *Gabb.*	N. J.; Del.
242.	**Arca Saffordi**, *Gabb.*	N. J.; Ten.
243.	**Arca subelongata**, *Conr.*	Tex.
244.	**Arca sulcatina**, *Evans & Shumard.*	Dak.; Id.
245.	**Arca uniopsis**, *Conr.*	N. J.
246.	**Arca vancouverensis**, *Meek.*	Vanc. I.
247.	**Cibota lineata**, *Conr.*	Ala.; Miss.
248.	**Cibota multiradiata**, *Gabb.*	N. J.
249.	**Cibota rostellata**, (*Morton*) *Gabb.*	N. J.

Trigoniidæ.

250.	**Trigonia Emoryi**, *Conr.*	Tex.
251.	**Trigonia Eufalensis**, *Gabb.*	N. J.; Ala.; Ten.; Miss.
252.	**Trigonia Evansi**, *Meek.*	Vanc. I.
253.	**Trigouia limbata**, *D'Orb.?*	Tex.; Ala.
254.	**Trigonia Mooreana**, *Gabb.*	Tex.
255.	**Trigonia plicatocostata**, *Galeotti.*	Mex.
256.	**Trigonia texana**, *Conr.*	Tex.
257.	**Trigonia thoracica**, *Morton.*	N. J.; Del.; Ala.; Miss.; Ten.; Tex.

Pinnidæ.

258.	**Pinna calamitoides**, *Shumard.*	Vanc. I.
259.	**Pinna fibrosa**, *Meek & Hayden.*	Dak.
260.	**Pinna laqueata**, *Conr.*	N. J.; Ala.; Miss.
261.	**Pinna rostriformis**, *Morton.*	N. J.
262.	**Pinna? lingula**, *Newberry.*	N. M.

Aviculidæ.

263.	**Pteria abrupta**, (*Conr.*) *Meek.*	N. J.
264.	**Pteria convexoplaua**, (*Roemer*) *Meek.*	Tex.
265.	**Pteria cretacea**, (*Conr.*) *Meek.*	Ark.
266.	**Pteria Haydeni**, (*Hall & Meek*) *Meek.*	Dak.
267.	**Pteria iridescens**, (*Shumard*) *Meek.*	Tex.
268.	**Pteria laripes**, (*Morton*) *Meek.*	Del.
269.	**Pteria linguiformis**, (*Evans & Shumard*) *Meek.*	Id.; Dak.; Id.
270.	**Pteria nebrascana**, (*Evans & Shumard*) *Meek.*	Dak.; Br. Am.
271.	**Pteria pedernalis**, (*Roemer*) *Meek.*	Tex.
272.	**Pteria petrosa**, (*Conr.*) *Meek.*	Del.
273.	**Pteria planisulca**, (*Roemer*) *Meek.*	Tex.
274.	**Pteria subgibbosa**, (*Meek & Hayden*) *Meek.*	Dak.
275.	**Pteria triangularis**, (*Evans & Shumard*) *Meek.*	Vanc. I.
276.	**Gervillia ensiformis**, *Conr.*	N. J.; Ala.
277.	**Gervillia gregaria**, *Shumard.*	Tex.
278.	**Gervillia recta**, *Meek & Hayden.*	Dak.
279.	**Gervillia subtortuosa**, *Meek & Hayden*	Id.
280.	**Pulvinitea argeutea**, *Conr.*	Ala.: Miss.
281.	**Inoceramus alveatus**, *Morton.*	Ala.

282. **Inoceramus argenteus**, *Conr.* Ala.
283. **Inoceramus aviculoides**, *Meek.* Neb.; Dak.; Kans.; Iowa.
284. **Inoceramus Barabini**, *Morton.* N. J.; Dak.; Ala., &c.
285. **Inoceramus Balchii**, *Meek & Hayden.* Dak.
286. **Inoceramus capulus**, *Shumard.* Tex.
287. **Inoceramus confertim-annulatus**, *Roemer.* Tex.
288. **Inoceramus Conradi**, *Hall & Meek.* Neb.
289. **Inoceramus convexus**, *Hall & Meek.* Dak.
290. **Inoceramus Cripsii**, *Mantell?* Id.; Dak.
291. **Inoceramus cuneatus**, *Meek & Hayden.* Id.; N. J.
292. **Inoceramus exogyroides**, *Meek & Hayden.* Id.
293. **Inoceramus fragilis**, *Hall & Meek.* Neb.
294. **Inoceramus gibbus**, *Tuomey.* Miss.
295. **Inoceramus incurvus**, *Meek & Hayden.* Dak.
296. **Inoceramus inflatus**, *Tuomey.* Ala.
297. **Inoceramus latus**, *Mantell?* Tex.; Dak.
298. **Inoceramus Larouxii**, *Marcou.* N. M.
299. **Inoceramus Mortoni**, *Meek & Hayden.* Dak.
300. **Inoceramus nebrascensis**, *Owen.* Dak.
301. **Inoceramus perovalis**, *Conr.* Del.
302. **Inoceramus pertenuis**, *Meek & Hayden.* Neb.; Id.; N. M.
303. **Inoceramus pseudomytiloides**, *Schiel.* Ind. T.; Kans.; Neb.
304. **Inoceramus proximus**, *Tuomey.* Ala.
305. **Inoceramus problematicus**, (*Schlot.*) *D'O.* Tex.; In. T.; Kans.; Neb.
306. **Inoceramus sagensis**, *Owen.* Dak.
307. **Inoceramus salæbrosus**, *Tuomey.* Ala.
308. **Inoceramus Simpsoni**, *Meek.* Id.
309. **Inoceramus striatus**, *Mantell?* Tex.
310. **Inoceramus subcompressus**, *Meek & Hayden.* Id.
311. **Inoceramus sublævis**, *Hall & Meek.* Dak.
312. **Inoceramus subundatus**, *Meek.* Vanc. I.
313. **Inoceramus tenuilineatus**, *Hall & Meek.* Dak.
314. **Inoceramus tenuirostratus**, *Meek & Hayden.* Id.
315. **Inoceramus texanus**, *Conr.* Tex.
316. **Inoceramus triangularis**, *Tuomey.* Ala.
317. **Inoceramus undulo-plicatus**, *Roemer.* Tex.
318. **Inoceramus undabundus**, *Meek & Hayden.* Id.
319. **Inoceramus Vanuxemi**, *Meek & Hayden.* Dak.
320. **Inoceramus [Actinoceramus] costellatus**, *Conr.* Miss.

Dreissenidæ.

321. **Dreissena tippana**, *Conr.* Miss.

Mytilidæ.

322. **Lithophagus affinis**, *Gabb.* N. J.
323. **Lithophagus ripleyanus**, *Gabb.* Miss.

324.	**Modiola attenuata**, *Meek & Hayden.*	Dak.
325.	**Modiola concentrico-costellata**, *Roemer.*	Tex.
326.	**Modiola cretacea**, *Conr.*	Ala.
327.	**Modiola Juliæ**, *Lea.*	N. J.
328.	**Modiola Meekii**, *Evans & Shumard.*	Dak.
329.	**Modiola ovata**, *Gabb.*	N. J.
330.	**Modiola pedernalis**, *Roemer.*	Tex.
331.	**Modiola Saffordi**, *Gabb.*	Ten.
332.	**Mytilus [?] simplicatus**, *Roemer.*	Tex.
333.	**Mytilus subarcuatus**, *Meek & Hayden.*	Id.
334.	**Mytilus tenuitesta**, *Roemer.*	Tex.
335.	**Crenella elegantula**, *Meek & Hayden.*	Id.
336.	**Crenella granulato-cancellata**, (*Roemer*) *Meek.*	Tex.
337.	**Crenella (Stalagmium) sericea**, *Conr.*	Ala.

Crassatellidæ.

338.	**Cardita eminula**, *Conr.*	Tex.
339.	**Cardita subquadrata**, *Gabb.*	Ten ?
340.	**Cardita subtetrica**, *Conr.*	Tex.
341.	**Crassatella alabamensis**, *D'Orb.*	Ala.
342.	**Crassatella cuneata**, *Gabb.*	Ala. ; Ten.
343.	**Crassatella delawarensis**, *Gabb.*	Del. ; N. J.
344.	**Crassatella Evansii**, *Hall & Meek.*	Dak.
345.	**Crassatella lintea**, *Conr.*	Ala. ; Miss.
346.	**Crassatella lineata**, *Shumard.*	Tex.
347.	**Crassatella monmouthensis**, *Gabb.*	N. J. ; Ala. ; Ten.
348.	**Crassatella parvula**, *Shumard.*	Tex.
349.	**Crassatella pteropsis**, *Conr.*	Ala. ; Miss.
350.	**Crassatella subplana**, *Conr.*	Ala.
351.	**Crassatella transversa**, *Gabb.*	N. J.
352.	**Crassatella vadosa**, *Morton.*	N. J. ; Del. ; Ala. ; Miss.
353.	**Astarte crenulata**, *Conr.*	Ala. ; N. J. ; Miss. ; Ten.
354.	**Astarte gregaria**, *Meek & Hayden.*	Dak.
355.	**Astarte lineolata**, *Roemer.*	Tex.
356.	**Astarte octolyrata**, *Gabb.*	N. J. ; Ten.
357.	**Astarte parilis**, *Conr.*	N. J.
358.	**Astarte texana**, *Conr.*	Tex.
359.	**Astarte washitaensis**, *Shumard.*	Tex. ; Ind. T.
360.	**? Opis bella**, *Conr.*	Miss.
361.	**? Opis bicarinata**, *Conr.*	Miss.
362.	**? Opis Haleana**, *D'Orb.*	Ala.

Solemyidæ.

363.	**Solemya subplicata**, *Meek & Hayden.*	Dak.

Kelliidæ.

364.	**Kellia cretacea**, *Conr.*	Ala.; Miss.

Diplodontidæ.

365.	**Mysia gibbosa**, *Gabb.*	N. J.; Del.
366.	**Mysia parilis**, *Conr.*	Ala.; Miss.
367.	**Sphærella concentrica**, *Conr.*	Ala.

Lucinidæ.

368.	**Lucina occidentalis**, (*Morton*) *Meek & Hayden.*	Id.; Dak.
369.	**Lucina parvilineata**, *Shumard.*	Tex.
370.	**Lucina pinguis**, *Conr.*	N. J.
371.	**Lucina sublenticularis**, *Shumard.*	Tex.
372.	**Lucina subundata**, *Hall & Meek.*	Dak.
373.	**Lucina ventricosa**, *Meek & Hayden.*	Id.; Dak.

Glossidæ.

374.	**Glossus ? moreauensis**, (*Meek & Hayden*) *Gabb.*	Dak.
375.	**Glossus washita**, (*Marcou*) *Gabb.*	Tex.
376.	**Glossus Conradi**, *Gabb.*	Ala.; N. J.

Cardiidæ.

377.	**Papyridea [Liopistha] elegantula**, (*Roemer*) *Conr.*	Tex.
378.	**Papyridea [Liopistha] bella**, *Conr.*	Miss.
379.	**Papyridea [Liopistha] protexta**, *Conr.*	N. J.
380.	**Papyridea (Liopistha) rostrata**, *Meek.*	Ark.
381.	**Papyridea ? sancti-sabæ**, (*Roemer*) *Meek.*	Tex.
382.	**Cardium abruptum**, *Gabb.*	Ten.
383.	**Cardium coloradoense**, *Shumard.*	Tex.
384.	**Cardium congestum**, *Conr.*	Tex.
385.	**Cardium curtum**, *Meek & Hayden.*	Id.; Utah.
386.	**Cardium eufalense**, *Conr.*	Ala.
387.	**Cardium hemicylum**, *Tuomey.*	Ala.
388.	**Cardium mediale**, *Conr.*	Tex.
389.	**Cardium multiradiatum**, *Gabb.*	Ala.; N. J.
390.	**Cardium [Acanthocardia] ripleyense**, *Conr.*	Ala.
391.	**Cardium [Acanthocardia] speciosum**, *Meek & Hayden.*	Id.
392.	**Cardium [Acanthocardia] tippanum**, *Conr.*	Ala.; Miss.
393.	**Cardium (Protocardia) arkansense**, *Conr.*	Ark.
394.	**Cardium [Protocardia] brazoense**, *Shumard.*	Tex.
395.	**Cardium [Protocardia] choctawense**, *Shumard.*	Tex.
396.	**Cardium (Protocardia) filosum**, *Conr.*	Tex.
397.	**Cardium [Protocardia] multistriatum**, *Shumard.*	Tex.
398.	**Cardium [Protocardia ?] pertenue**, *Meek & Hayden.*	Id.
399.	**Cardium [Protocardia ?] rarum**, *Evans & Shumard.*	Id.; Dak.
400.	**Cardium (Protocardia) scitulum**, *Meek.*	Vanc. I.

401. **Cardium [Protocardia?] subquadratum,** *Evans & Sh.*	Id.; Dak.
402. **Cardium (Protocardia?) texanum,** *Conr.*	Tex.
403. **Cardium (Liocardium) Spillmani,** *Conr.*	Miss.

Tancrediidæ.

404. **Tancredia americana,** *Meek & Hayden.*	Idah.

Cyrenidæ.

405. **Cyrena arenaria,** (*Meek & Hayden*) *Meek.*	Neb.; Dak.

Veniliidæ.

406. **Cyprina compressa,** *Meek & Hayden.*	Dak.
407. **Cyprina ovata,** *Meek & Hayden.*	Dak.
408. **Venilia Conradi,** *Morton.*	N. J.
409. **Venilia humilis,** (*Meek & Hayden*) *Meek.*	Id.; Dak.
410. **Venilia Gabbana,** *Meek.*	N. J.
411. **Venilia Mortoni,** *Meek & Hayden.*	Id.
412. **Venilia subtumida,** (*Meek & Hayden*) *Meek.*	Id.
413. **Venilia rhomboidea,** *Conr.*	N. J.
414. **Venilia trapezoidea,** *Conr.*	N. J.; Ala.; Miss.
415. **Venilia trigons,** *Gabb.*	N. J.
416. **Venilia Laphami,** (*Shumard*) *Meek.*	Tex.

Veneridæ.

417. **Cyclina? circularis,** (*Meek & Hayden*) *Meek.*	Id.; Dak.
418. **Dosinia densata,** (*Conr.*) *Gabb.*	N. J.
419. **Dosinia depressa,** *Conr.*	N. J.; Ala.; Miss.
420. **Dosinia excavata,** (*Morton*) *Conr.*	N. J.
421. **Dosinia haddonfieldensis,** *Lea.*	N. J.
422. **Dosinia obliquata,** *Conr.*	Ala.; Miss.
423. **Dosinia? tenuis,** *Meek.*	Vanc. I.
424. **Dione delawarensis,** *Gabb.*	Del.
425. **Dione eufalensis,** (*Conr.*) *Meek.*	Ala.
426. **Dione Deweyi,** (*Meek & Hayden*) *Meek.*	Dak.; Id.
427. **Dione leuouensis,** (*Conr.*) *Meek.*	Tex.
428. **Dione lamarensis,** (*Shumard*) *Meek.*	Tex.
429. **Dione missouriana,** (*Morton*) *Meek.*	Id.; Dak.
430. **Dione nebrascensis,** *Meek & Hayden.*	Dak.; Id.
431. **Dione orbiculata,** (*Hall & Meek*) *Meek*	Neb.
432. **Dione Owenana,** (*Meek & Hayden*) *Meek.*	Id.
433. **Dione? pellucida,** (*Meek & Hayden*) *Meek.*	Id.
434. **Dione texana,** (*Conr.*) *Meek.*	Tex.
435. **Dione tippana,** (*Conr.*) *Meek.*	Ala.; Miss.
436. **Dione [?] Meekana,** (*Gabb*) *Meek.*	Miss.
437. **Dione [?] ripleyana,** (*Gabb*) *Meek.*	Miss.
438. **Dione [?] tenuis,** (*Hall & Meek*) *Meek.*	Neb.
439. **Venus [?] sublamellosa,** *Shumard.*	Tex.

Tellinidæ.

440. **Abra? formosa,** (*Meek & Hayden*) *Meek.*	Dak.
441. **Capsa texana,** *Conr.*	Tex.
442. **Sanguinolaria cretacea,** *Conr.*	Ala.
443. **Tellina? cheyennensis,** *Meek & Hayden.*	Dak.
444. **Tellina eufalensis,** *Conr.*	Ala.
445. **Tellina equilateralis,** *Meek & Hayden.*	Id.
446. **Tellina nitidula,** *Meek & Hayden.*	Id.
447. **Tellina ripleyana,** *Conr.*	Miss.
448. **Tellina scituta,** *Meek & Hayden.*	Dak.
449. **Tellina? subelliptica,** *Meek & Hayden.*	Dak.
450. **Tellina (Tellinimera) eborea,** *Conr.*	Ala.; Miss.
451. **Tellina (Tellinimera) limatula,** *Conr.*	Ala.
452. **Arcopagia [?] texana,** *Roemer.*	Tex.
453. **Linearia metastriata,** *Conr.*	Ala.
454. **Linearia? Irradians,** (*Roemer*) *Meek.*	Tex.
455. **Linearia? cancellato-sculpta,** (*Roemer*) *Meek.*	Tex.

Mactridæ.

456. **Mactra alta,** *Meek & Hayden.*	Id.
457. **Mactra formosa,** *Meek & Hayden.*	Id.
458. **Mactra gracilis,** *Meek & Hayden.*	Id.
459. **Mactra siouxensis,** *Meek & Hayden.*	Dak.; Iowa.
460. **Mactra texana,** *Conr.*	Tex.
461. **Mactra Warrenana,** *Meek & Hayden.*	Dak.

Anatinidæ.

462. **Homomya alta,** *Roemer.*	Tex.
463. **Pholadomya elegantula,** *Evans & Shumard.*	Vanc. I.
464. **Pholadomya occidentalis,** *Morton.*	N. J.; Del.; Miss.; Ark.
465. **Pholadomya papyracea,** *Meek & Hayden.*	Id.
466. **Pholadomya pedernalis,** *Roemer.*	Tex.
467. **Pholadomya subventricosa,** *Meek & Hayden.*	Id.
468. **Pholadomya subelongata,** *Meek.*	Vanc. I.
469. **Pholadomya tenua,** *Tuomey.*	Ala.
470. **Pholadomya texana,** *Conr.*	Tex.
471. **Pholadomya tippana,** *Conr.*	Miss.; Ala.
472. **Pholadomya umbonata,** *Roemer.*	Tex.
473. **Pholadomya [Cymella] undata,** *Meek & Hayden.*	Id.
474. **Goniomya americana,** *Meek & Hayden.*	Dak.
475. **Goniomya borealis,** *Meek.*	Vanc. I.
476. **Anatimya anteradiata,** *Conr.*	Miss.
477. **Anatimya postsulcata,** *Conr.*	Miss.
478. **Anatimya papyra,** *Conr.*	Miss.
479. **Neæra alæformis,** *Shumard.*	Tex.

480. **Neæra fibrosa**, (*Evans & Shumard*) *Meek.*	Dak.
481. **Neæra moreanensis**, *Meek & Hayden.*	Dak.
482. **Neæra ventricosa**, *Meek & Hayden.*	Dak.
483. **Thracia gracilis**, *Meek & Hayden.*	Dak.
484. **Thracia occidentalis**, *Meek.*	Vanc. I.
485. **Thracia ? Prouti**, *Meek & Hayden.*	Dak.
486. **Thracia subtortuosa**, *Meek & Hayden.*	Dak.
487. **Thracia subtruncata**, *Meek.*	Vanc. I.
488. **Periploma applicata**, *Conr.*	Miss.
489. **Anatina elliptica**, *Gabb.*	N. J.
490. **Anatina sulcatina**, *Shumard.*	Tex.

Corbulidæ.

491. **Corbula crassimarginata**, *Meek & Hayden.*	Dak.
492. **Corbula crassiplicata**, *Gabb.*	N. J.; Ten.
493. **Corbula enfalensis**, *Conr.*	Ala.
494. **Corbula Foulkei**, *Lea.*	N. J.
495. **Corbula graysonensis**, *Shumard.*	Tex.
496. **Corbula Hilgardii**, *Gabb.*	Ala.
497. **Corbula inornata**, *Meek & Hayden.*	Dak.
498. **Corbula occidentalis**, *Conr.*	Tex.
499. **Corbula [?] subcompressa**, *Gabb.*	N. J.; Ten.
500. **Corbula Tuomeyi**, *Shumard.*	Tex.
501. **Corbulamella gregaria**, *Meek & Hayden.*	Dak.

Saxicavidæ.

502. **Panopæa decisa**, (*Conr.*) *Gabb.*	N. J.; Del.
503. **Panopæa Newberryi**, *Shumard.*	Tex.
504. **Panopæa occidentalis**, *Meek & Hayden.*	Dak.
505. **Panopæa subplicata**, *Shumard.*	Tex.
506. **Panopæa subparallela**, *Shumard.*	Tex.
507. **Panopæa texana**, *Shumard.*	Tex.
508. **Panopæa Tuomeyi**, *Gabb.*	Ala.
509. **? Pachymya austenensis**, *Shumard.*	Tex.

Solenidæ.

510. **Siliquaria biplicata**, *Conr.*	Ala.
511. **Siliqua cretacea**, *Gabb.*	N. J.
512. **Pharella dakotensis**, *Meek & Hayden.*	Iowa.
513. **Legumen appressa**, *Conr.*	Ala.; Miss.
514. **Legumen elliptica**, *Conr.*	Ala.; Miss.; N. J.
515. **Legumen planata**, *Gabb.*	N. J.; Ala.

Gastrochænidæ.

516. **Clavagella armata**, *Morton.*	N. J.
517. **Gastrochæna americana**, *Gabb.*	N.J.; Ala.

Teredidæ.

518. **Teredo calamitoides**, *Gabb.*	Ala.
519. **Teredo contorta**, *Gabb.*	N. J.
520. **Teredo globosa**, *Meek & Hayden.*	Dak.
521. **Teredo irregularis**, *Gabb.*	N.J.; Ala.
522. **Teredo selliformis**, *Meek & Hayden.*	Dak.
523. **Teredo tibialis**, *Morton.*	N. J.; Del.
524. **Polarthus americanus**, *Gabb.*	N. J.

Pholadidæ.

525. **Martesia? cuneata**, *Meek & Hayden.*	Dak.
526. **Goniochasma Stimpsoni**, (*Meek & Hayden*) *Meek.*	Dak.
527. **Xylophagella elegantula**, (*Meek & Hayden*) *Meek.*	Dak.
528. **Pholas cithara**, *Morton.*	N. J.
529. **Pholas cretacea**, *Gabb.*	N. J.

CLASS **GASTEROPODA.**

SUBCLASS OPISTHOBRANCHIATA.

Order **TECTIBRANCHIATA.**

Bullidæ.

530. **Bulla macrostoma**, *Gabb.*	Ala.
531. **Bulla minor**, *Meek & Hayden.*	Dak.
532. **Bulla Mortoni**, *Lyell & Forbes.*	N. J.
533. **Bulla nebrascensis**, *Meek & Hayden.*	Id.
534. **Bulla speciosa**, *Meek & Hayden.*	Id.
535. **Bulla volvaria**, *Meek & Hayden.*	Dak.

Cylichnidæ.

536. **Cylichna minuscula**, *Shumard.*	Tex.
537. **Cylichna recta**, *Gabb.*	N. J.
538. **Cylichna scitula**, *Meek & Hayden.*	Dak.
539. **Cylichna secalina**, *Shumard.*	Tex.
540. **Cylichna striatella**, *Shumard.*	Tex.

Ringiculidæ.

541. **Cinulia (Avellana) concinna**, (*Hall & Meek*) *M. & H.*	Dak.
542. **Cinulia (Avellana) pulchella**, (*Shumard*) *Meek.*	Tex.
543. **Cinulia (Avellana) texana**, *Shumard.*	Tex.
544. **Cinulia (?) naticoides**, (*Gabb*) *Meek.*	N. J.
545. **Ringinella subpellucida**, (*Shumard*) *Meek.*	Tex.
546. **Ringinella acutispira**, (*Shumard*) *Meek.*	Tex.

Actæonidæ.

547. **Solidula attenuata,** *Meek & Hayden.*	Id.
548. **Solidula biplicata,** (*Gabb*) *Meek.*	N. J.
549. **Solidula [?] bullata,** (*Morton*) *Gabb.*	N. J.
550. **Solidula lenta,** *Conrad.*	Miss.
551. **Solidula Mortoni,** (*Forbes*) *Gabb.*	N. J.
552. **Solidula Riddelli,** *Shumard.*	Tex.
553. **Solidula subelliptica,** *Meek & Hayden.*	Dak.
554. **Actæon cretacea,** *Gabb.*	N. J.
555. **Actæon modicella,** *Conr.*	Miss.; Ala.
556. **Actæon ovoidea,** *Gabb.*	N. J.
557. **Actæon texana,** *Shumard.*	Tex.
558. **Actæonina texana,** (*Roemer*) *Gabb.*	Tex.
559. **Bullopsis cretacea,** *Conr.*	Miss.
560. **Globiconcha coniformis,** *Roemer.*	Tex.
561. **Globiconcha curta,** *Gabb.*	N. J.
562. **Globiconcha elevata,** *Shumard.*	Tex.; Ind. T.

SUBCLASS PROSOBRANCHIATA.

Order CYCLOBRANCHIATA.

? Dentalidæ.

563. **Dentalium fragile,** *Meek & Hayden.*	Dak.
564. **Dentalium gracile,** *Hall & Meek.*	Dak.
565. **Dentalium nanaimoense,** *Meek.*	Vanc. I.
566. **Dentalium pauperculum,** *Meek & Hayden.*	Dak.
567. **Dentalium subarcuatum,** *Conr.*	N. J.

Patellidæ.

568. **Helcion [?] tentorium,** (*Morton*) *D'Orb.*	N. J.

Tecturidæ.

569. **Anisomyon alveatus,** *Meek & Hayden.*	Id.
570. **Anisomyon borealis** (*Morton*) *Meek & Hayden.*	Dak.
571. **Anisomyon Haydeni,** *Shumard.*	Tex.
572. **Anisomyon ? inæquicostatus,** (*Shumard*) *Meek.*	Tex.
573. **Anisomyon patelliformis,** *Meek & Hayden.*	Id.
574. **Anisomyon sexsulcatus,** *Meek & Hayden.*	Id.
575. **Anisomyon Shumardi,** *Meek & Hayden.*	Dak.
576. **Anisomyon subovatus,** *Meek & Hayden.*	Id.
577. **Tectura ? occidentalis,** (*Hall & Meek*) *Meek.*	Dak.
578. **Tectura ? papillata,** *Meek & Hayden.*	Dak.
579. **Tectura ? parva,** *Meek & Hayden.*	Dak.

580. **Delphinula [?] lapidosa,** *Morton.*	N. J.; Del.
581. **Straparollus [?] lapidosus,** *Gabb.*	Ala.
582. **Straparollus [?] subplanus,** *Gabb.*	Ala.

Order RHIPIDOGLOSSATA.

Phasianellidæ.

583. **Eutropia Haleana,** (*D'Orb.*) *Meek.*	Ala.
584. **Eutropia perovata,** *Shumard.*	Tex.
585. **Eutropia [?] punctata,** *Gabb.*	N. J.

Pleurotomariidæ.

586. **Pleurotomaria austenensis,** *Shumard.*	Tex.
587. **Pleurotomaria [?] crotaloides,** (*Morton*) *D'Orb.*	Ala.

Trochidæ.

588. **Margaritella Abbotti,** (*Gabb*) *Meek.*	N. J.
589. **Margaritella flexistriata,** (*Evans & Shumard*) *M. & H.*	Id.; Dak.
590. **Margarita abyssinis,** (*Gabb*) *Meek.*	N. J.
591. **Trochus Mortoni,** *Gabb.*	Ala.

Neritidæ.

592. **Neritella (Nereis) densata,** (*Conr.*) *Meek.*	Miss.

Order CTENOBRANCHIATA.

Vanikoridæ.

593. **Vanikoro ambigua,** (*Meek & Hayden*) *Meek.*	Dak.
594. **Neritopsis? Tuomeyana,** *Meek & Hayden.*	Id.

Capulidæ.

595. **? Thylacus cretacea,** *Conr.*	Ala.

Phoridæ.

596. **Phorus leprosus,** (*Morton*) *Gabb.*	N. J.; Ala.
597. **Phorus? umbilicatus,** *Tuomey.*	Miss.

Turritellidæ.

598. **Turritella altilis,** *Conr.*	Miss.
599. **Turritella corsicana,** *Shumard.*	Tex.
600. **Turritella encrinoides,** *Morton.*	N. J.; Ala.; Miss.
601. **Turritella granulicostata,** *Gabb.*	N. J.
602. **Turritella fastigata,** *Tuomey.*	Ala.
603. **Turritella hardemanensis,** *Gabb.*	N. J.
604. **Turritella irrorata,** *Conr.*	Tex.; Ind. T.

605. **Turritella leonensis**, *Conr.*	Tex.
606. **Turritella multilineata**, *Evans & Shumard.*	Dak.
607. **Turritella pumila**, *Gabb.*	Tenn.
608. **Turritella Saffordii**, *Gabb.*	Tenn.
609. **Turritella seriatim-granulata**, *Roemer.*	Tex.
610. **Turritella tennesseensis**, *Gabb.*	Tenn.
611. **Turritella tippana**, *Conrad.*	Miss.
612. **Turritella trilira**, *Conr.*	Miss.; Ala.
613. **Turritella vertebroides**, *Morton.*	N. J.; Ala.; Miss.
614. **Turritella Winchelli**, *Shumard.*	Tex.

Littorinidæ.

615. **Spironema tenuilineata**, (*Meek & Hayden*) *Meek.*	Dak.
616. **Spironema bella**, (*Conr.*) *Meek.*	Ala.

Cerithiidæ.

617. **Cerithium bosquense**, *Shumard.*	Tex.
618. **Cerithium Bustamentii**, *Galeotti.*	Mex.
619. **Cerithium cingulatum**, *Galeotti.*	Mex.
620. **Cerithium subminutum**, *D'Orb.*	Mex.
621. **Cerithium [?] suturosum**, *Galeotti.*	Mex.
622. **Cerithium nodosum**, *Tuomey.*	Ala.

Aporrhaidæ.

623. **Anchura abrupta**, *Conr.*	Ala.
624. **Anchura? biangulata**, (*Meek & Hayden*) *Meek.*	Id.
625. **Anchura? parva**, (*Meek & Hayden*) *Meek.*	Id.
626. **Anchura? sublævis**, (*Meek & Hayden*) *Meek.*	Id.
627. **Anchura (Drepanochilus) americana**, (*E. & S.*) *Meek.*	Dak.; Id.
628. **Anchura (Drepanochilus) decemlirata**, (*Conr.*) *Meek.*	Ala.
629. **Anchura (Drepanochilus) nebrascensis**, (*E. & S.*) *Mk.*	Dak.; Id.
630. **Anchura (Drepanochilus) rostrata**, (*Gabb*) *Meek.*	N. J.

Cancellariidæ.

631. **Cancellaria [?] eufalensis**, *Gabb.*	Ala.
632. **Cancellaria [?] septemlirata**, *Gabb.*	N. J.
633. **Morea cancellaria**, *Conr.*	Miss.
634. **Morea naticella**, *Gabb.*	N. J.
635. **Turbinopsis [?] alabamensis**, *Gabb.*	Ala.
636. **Turbinopsis depressus**, *Gabb.*	N. J.; Del.
637. **Turbinopsis Hilgardi**, *Conr.*	Miss.; Ala.

Trichotropidæ.

638. **Trichotropis [?] cancellaris**, *Conr.*	Miss.

Cypræidæ.

639. **Cypræa Mortoni**, *Gabb.*	Ala.; N. J.

Strombidæ.

640. **Rostellaria [?] arenarum,** *Morton.*	N. J.; Ala.
641. **Rostellaria ? oheyennensis,** *M. & H.*	Dak.
642. **Rostellaria [?] pennata,** *Morton.*	Dal.; N. J.; Ala.
643. **Isopleurus curviliratus,** (*Conr.*) *Meek.*	Miss.
644. **Isopleurus Meekianus,** (*Gabb*) *Meek.*	Ala.
645. **Pugnellus densatus,** *Conr.*	Ala.; Miss.
646. **Pterocerella tippana,** (*Conr.*) *Meek.*	Miss.
647. **Pterocerella ? macrodactyla,** (*Troost*) *Meek.*	Tenn.

Conidæ.

648. **Conus canalis,** *Conr.*	Ala.

Cerithiopsidæ.

649. **Cerithiopsis moreauensis,** *Meek & Hayden.*	Dak.

Terebridæ.

650. **Terebra [?] minuta,** *Galeotti.*	Mex.

Pyramidellidæ.

651. **Chemnitzia corona,** *Conr.*	Miss.
652. **Chemnitzia [?] gloriosa,** *Roemer.*	Tex.
653. **Chemnitzia ? interrupta,** *Conr.*	Miss.
654. **Chemnitzia laqueata,** *Conr.*	Miss.
655. **Chemnitzia melanopsis,** *Conr.*	Miss.
656. **Chemnitzia [?] occidentalis,** *Gabb.*	Ind. T.
657. **Chemnitzia [?] Spillmani,** *Gabb.*	Miss.
658. **Chemnitzia ? texana,** (*Roemer*) *Meek.*	Tex.

Scalidæ.

659. **Scala annulata,** (*Morton*) *Gabb.*	N. J.
660. **Scala bicarinifera,** *Shumard.*	Tex.
661. **Scala (Acirsa) cerithiformis,** *Meek & Hayden.*	Dak.
662. **Scala Forshayii,** (*Shumard*) *Meek.*	Tex.
663. **Scala lamarensis,** *Shumard.*	Tex.
664. **Scala Sillimani,** (*Morton*) *Gabb.*	N. J.; Ala.

Cassididæ.

665. **Sconsia alabamensis,** *Gabb.*	Ala.

Naticidæ.

666. **Amauropsis paludinæformis,** (*Hall & Meek*) *M. & H.*	Dak.
667. **Lunatia ? altispira,** *Gabb.*	N. J.
668. **Lunatia ? acutispira,** (*Shumard*) *Meek.*	Tex.
669. **Lunatia concinna,** (*Hall & Meek*) *Meek & Hayden.*	Dak.
670. **Lunatia Halli,** *Gabb.*	N. J.

671. **Lunatia moreauensis**, *Meek & Hayden.*	Dak.
672. **Lunatia obliquata**, (*Hall & Meek*) *Meek & Hayden.*	Id. ; Dak.
673. **Lunatia occidentalis**, *Meek & Hayden.*	Id. ; Dak.
674. **Lunatia texana**, (*Conr.*) *Gabb.*	Tex.
675. **Gyrodes Abbotti**, *Gabb.*	N. J.
676. **Gyrodes alveata**, *Conr.*	Miss.
677. **Gyrodes crenata**, *Conr.*	Miss.
678. **Gyrodes ? obtusivolva**, *Gabb.*	N. J.
679. **Gyrodes petrosa** (*Morton*) *Gabb.*	N. J.
680. **Gyrodes Spillmanii**, *Gabb.*	Miss.
681. **Natica [?] pedernalis**, *Roemer.*	Tex.
682. **Natica [?] praegrandis**, *Roemer.*	Tex.

Volutidæ.

683. **Volutilithes [?] Abbottii**, *Gabb.*	N. J.
684. **Volutilithes [?] cretacea**, *Conr.*	Ala. ; Miss.
685. **Volutilithes eufalensis**, *Conr.*	Ala.
686. **Volutilithes [?] navarroensis**, *Shumard.*	Tex.
687. **Volutilithes Saffordi**, *Gabb.*	Ten.
688. **Volutilithes (Athleta) leioderma**, *Conr.*	Ala.
689. **Rostellites bellus**,(*Gabb*) *Meek.*	N. J.
690. **Rostellites biplicatus**,(*Gabb*) *Meek.*	N. J.
691. **Rostellites Conradi**, (*Gabb*) *Meek.*	N. J.
692. **Rostellites nasutus**,(*Gabb*) *Meek.*	N. J.
693. **Rostellites texanus**,*Conr.*	Tex.
694. **Voluta cancellata**, *Tuomey.*	Ala.
695. **Voluta ? delawarensis**, *Gabb.*	Del.
696. **Voluta Kanei**, *Gabb.*	N. J.
697. **Voluta mucronata**, *Gabb.*	N. J.
698. **Voluta Spillmani**, *Tuomey.*	Ala.
699. **Voluta subjugosa**, *Gabb.*	Ala.
700. **Voluta Tuomeyana**, *Gabb.*	Ala.

Turbinellidæ.

701. **Turbinella parva**, *Gabb.*	N. J.
702. **Turbinella subconica**, *Gabb.*	N. J.

Fasciolariidæ.

703. **Fasciolaria buccinoides**, *Meek & Hayden.*	Dak.
704. **Fasciolaria ? cretacea**, *Meek & Hayden.*	Dak.
705. **Fasciolaria Saffordi**, *Gabb.*	Ten.
706. **Fasciolaria Slackii**, *Gabb.*	N. J.

Purpuridæ.

707. **Rapa pyruloidea**, *Gabb.*	N. J.
708. **Rapa supraplicata**, *Conr.*	Miss.
709. **Purpuroidea ? dubia**, *Gabb.*	N. J.

Buccinidæ.

710.	**Buccinum constrictum,** (*Hall & Meek*) *Meek & Hayden.*	Dak.
711.	**Pseudobuccinum nebrascense,** *Meek & Hayden.*	Dak.
712.	**? Buccinopsis Parryi,** *Conr.*	Tex.

Tritoniidæ.

713.	**Trachytriton vinculum,**(*Hall & Meek*) *Meek.*	Dak.

Pleurotomidæ.

714.	**Daphnella ? eufalensis,** *Conr.*	Ala.
715.	**Daphnella ? lintea,** *Conr.*	Ala.
716.	**Daphnella ? subfilosa,** *Conr.*	Ala.
717.	**Drillia [?] distans,** *Conr.*	Ala. ; Miss.
718.	**Drillia novemcostata,** *Conr.*	Miss.
719.	**Drillia ? tippana,** *Conr.*	Miss.
720.	**Turris minor,** (*Evans & Shumard*) *Meek & Hayden.*	Dak.
721.	**Turris texanus,** (*Shumard*) *Meek.*	Tex.
722.	**Turris [Surcula] contortus** *Meek & Hayden.*	Dak.

Muricidæ.

723.	**Clavellithes (Piestochilus) Scarboroughi,** (*M. & H.*) *Meek.*	Dak.
724.	**Cantharus ? Vaughani,** (*Meek & H.*) *Meek.*	Dak.
725.	**Pyrifusus bellaliratus** *Conr.* MSS.	Miss.
726.	**Pyrifusus ? flexicostatus** (*Meek & Hayden*) *Meek.*	Id.
727.	**Pyrifusus ? Haleanus,** (*D'Orb.*) *Meek.*	Ala.
728.	**Pyrifusus ? impressus** (*Gabb*) *Meek.*	Ten.
729.	**Pyrifusus intertextus** (*Meek & Hayden*) *Meek.*	Id.
730.	**Pyrifusus Newberryi,** (*Meek & Hayden*) *Meek.*	Id. ; Dak.
731.	**Pyrifusus subdensatus,** *Conr.*	Miss.
732.	**Pyrifusus subturritus** (*Meek & Hayden*) *Meek.*	Dak.
733.	**Strepsidura ripleyana,** *Conr.*	Miss.
734.	**Tritonifusus ? tenuilineatus,** (*Hall & Meek*) *Meek.*	Dak.
735.	**Fusus [?] alabamensis,** *D'Orb.*	Ala.
736.	**Fusus Culbertsoni,** *Meek & Hayden.*	Dak.
737.	**Fusus [?] eufalensis,** *Tuomey.*	Ala.
738.	**Fusus Galpinianus,** *Meek & Hayden.*	Dak.
739.	**Fusus Holmesianus,** *Gabb.*	Ala.
740.	**Fusus mullicaensis,** *Gabb.*	N. J.
741.	**Fusus nebrascensis,** *Evans & Shumard.*	Dak.
742.	**Fusus novemliratus,** *Conr.*	Miss.
743.	**Fusus pedernalis,** *Roemer.*	Tex.
744.	**Fusus [?] retifer,** *Gabb.*	N. J.
745.	**Fusus Shumardi,** *Hall & Meek.*	Dak.
746.	**Fusus [?] tippanus,** *Conr.*	Ala.
747.	**Tudicla trochiformis,** (*Tuomey*) *Gabb.*	Ala.

748. **Tudicla (Pyropsis) Bairdi,** (*M. & H.*) *Meek.*	Dak.
749. **Tudicla (Pyropsis) perlata,** *Conr.*	Miss.
750. **Tudicla elevata,** *Gabb.*	N. J.
751. **Tudicla? dakotensis,** (*M. & H.*) *Meek.*	Dak.
752. **Perrissolax? brevissima,** (*D'O.*) *Gabb.*	Ala.
753. **Perrissolax octolyrata,** (*Conr.*) *Gabb.*	Ala.; Miss.; N. J.
754. **Perrissolax trivolva,** *Gabb.*	N. J.
755. **Perrissolax [?] Richardsoni,** (*Tuomey*) *Gabb.*	Ala.

Class CEPHALOPODA.

Order TETRABRANCHIATA.

Ammonitidæ.

756. **Baculites anceps,** *Lamarck?*	Ala.; Ten.; Del.; Tex., &c.
757. **Baculites annulatus,** *Conr.*	Tex.
758. **Baculites asper,** *Morton.*	Ala.
759. **Baculites asperoides,** *Meek & Hayden.*	Id.
760. **Baculites bacculus,** *Meek & Hayden.*	Id.; Dak.
761. **Baculites carinatus,** *Morton.*	Ala.
762. **Baculites chickoensis,** *Trask.*	Cal.
763. **Baculites compressus,** *Say.*	Dak.; Id.
764. **Baculites gracilis,** *Shumard.*	Tex.
765. **Baculites grandis,** *Hall & Meek.*	Dak.
766. **Baculites labyrinthicus,** *Morton.*	Ala.
767. **Baculites occidentalis,** *Meek.*	Vanc. I.
768. **Baculites ovatus,** *Say.*	Dak.; Id.; N. J.; Ala.; Miss., &c.
769. **Ptychoceras (Solenoceras) annulifer,** *Morton.*	N. J.; Ala.
770. **Ptychoceras Leai,** (*Troost*) *Meek.*	Ten.
771. **Ptychoceras Mortoni,** *Meek & Hayden.*	Dak.
772. **Ptychoceras texana,** *Shumard.*	Tex.
773. **Ptychoceras Verneuilii,** (*Troost*) *Meek.*	Ten.
774. **Hamites [?] arculus,** *Morton.*	Ala.
775. **Hamites [?] columna,** (*Morton*) *D'Orb.*	Ala.
776. **Hamites Fremonti,** *Marcou.*	Tex.
777. **Hamites larvatus,** *Conr.*	Tex.
778. **Hamites rotundatus,** *Conr.*	Tex.
779. **Hamites [?] torquatus,** *Morton.*	Ala.
780. **Hamites [?] vertebralis,** *Morton.*	Ala.
781. **Ancyloceras annulatus,** *Shumard.*	Tex.
782. **Ancyloceras? approximans,** *Conr.*	Ark.
783. **Ancyloceras [?] Nicolleti,** *Hall & Meek.*	Dak.
784. **Ancyloceras uncus,** *Meek & Hayden.*	Dak.
785. **Scaphites abyssinus,** (*Morton*) *Meek & Hayden.*	Dak.
786. **Scaphites cheyennensis,** (*Owen*) *Meek & Hayden.*	Dak.

787. **Scaphites Conradi,** (*Morton*) *D'Orb.* N. J.; Del.; Ala.; Miss.; Dak.; Id.
788. **Scaphites Nicolletii,** (*Morton*) *Meek & Hayden.* Dak.; Id.
789. **Scaphites hippocrepis,** *DeKay.* Del.; N. J.
790. **Scaphites larviformis,** *Meek & Hayden.* Dak.; Id.; Neb.; N. Mex.
791. **Scaphites mandanensis,** (*Morton*) *Meek & Hayden.* Dak.
792. **Scaphites nodosus,** *Owen.* Id.; Dak.
793. **Scaphites nodosus,** *var.* **brevis,** *Meek & Hayden.* Id.; Dak.
794. **Scaphites nodosus,** *var.* **exilis,** *Meek & Hayden.* Id.
795. **Scaphites nodosus,** *var.* **quadrangularis,** *Meek & Hayden.* Id.
796. **Scaphites nodosus,** *var.* **plenus,** *Meek & Hayden.* Id.
797. **Scaphites semicostatus,** *Roemer.* Tex.
798. **Scaphites texanus,** *Roemer.* Tex.
799. **Scaphites vermicularis,** *Shumard.* Tex.
800. **Scaphites vermiformis,** *Meek & Hayden.* Dak.
801. **Scaphites verrucosus,** *Shumard.* Tex.
802. **Scaphites ventricosus,** *Meek & Hayden.* Id.
803. **Scaphites Warreni,** *Meek & Hayden.* Dak.
804. **Trigonellites cheyennensis,** (*Meek & Hayden*) *Gabb.* Dak.
805. **Trigonellites fragilis,** (*Meek & Hayden*) *Gabb.* Dak.
806. **Ceratites americanus** *Harper.* Ala.
807. **Ammonites acutocarinatus,** *Shumard.* Tex.
808. **Ammonites angustus** *Tuomey.* Ala.
809. **Ammonites Belknapii,** *Marcou.* Tex.
810. **Ammonites Barnstoni,** *Meek.* (Placed provis. in Crt. List.) Brit. Am.
811. **Ammonites Billingsi,** *Meek.* " " Brit. Am.
812. **Ammonites chickoensis,** *Trask.* Cal.
813. **Ammonites complexus,** *Hall & Meek.* Dak.; N. J.
814. **Ammonites delawarensis,** *Morton.* Del.; N. J.; Ala.
815. **Ammonites dentato-carinatus,** *Roemer.* Tex.
816. **Ammonites flacidicosta,** *Roemer.* Tex.
817. **Ammonites Galpini,** *Evans & Shumard.* Dak.
818. **Ammonites geniculatus,** *Conr.* Tex.
819. **Ammonites Gibbonianus,** *Lea?* Tex.
820. **Ammonites guadalupae,** *Roemer.* Tex.
821. **Ammonites Graysonensis,** *Shumard.* Tex.
822. **Ammonites Halli,** *Meek & Hayden.* Id.
823. **Ammonites inequiplicatus,** *Shumard.* Tex.
824. **Ammonites leonensis,** *Conr.* Tex.
825. **Ammonites lobatus,** *Tuomey.* Ala.; N. J.; Dak.
826. **Ammonites magnificus,** *Tuomey.* Ala.
827. **Ammonites Marooanus,** *Shumard.* Tex.
828. **Ammonites Meekianus,** *Shumard.* Tex.
829. **Ammonites Meekii,** *Gabb.* Ala.
830. **Ammonites Mullananus,** *Meek & Hayden.* Id.
831. **Ammonites Newberryanus,** *Meek.* Vanc. I.

832. **Ammonites novimexicanus,** *Marcou.*	Tex.; N. M.
833. **Ammonites opalis,** *Owen.*	Dak.
834. **Ammonites pedernalis,** *Von Buch.*	Tex.
835. **Ammonites percarinatus,** *Hall & Meek.*	Neb.; Dak.; Id.; N. M.
836. **Ammonites peruvianus,** *Von Buch?*	Tex
837. **Ammonites placenta,** *DeKay.*	N. J.; Del.; Ala.; Miss.; Ten.; N. M
838. **Ammonites placenta,** *var.* **intercalaris,** *Meek & Hayden.*	Dak.
839. **Ammonites pleuricepta,** *Conr.*	Tex.
840. **Ammonites ramosus,** *Meek.*	Vanc. I.
841. **Ammonites ramosissimus,** *Tuomey.*	Ala.
842. **Ammonites [?] reconditus,** *Galeotti.*	Mex.
843. **Ammonites Rioli,** *Galeotti.*	Mex.
844. **Ammonites Shumardi,** *Marcou.*	Tex.
845. **Ammonites Sillimani,** *D'Orb.*	Id. ?
846. **Ammonites Swallovii,** *Shumard.*	Tex.
847. **Ammonites syrtalis,** *Morton.*	Ala.
848. **Ammonites Tuomeyi,** *Gabb.*	Ala.
849. **Ammonites vancouverensis,** *Meek.*	Vanc. I.
850. **Ammonites vespertinus,** *Morton.*	Ark.; Ind. T.; N. M.; Ind. T.; Tex.
851. **Helicoceras Conradi,** (*Morton*) *Gabb.*	N. J.
852. **Helicoceras cochleatum,** *Meek & Hayden.*	Dak.
853. **Helicoceras navarroensis,** *Shumard.*	Tex.
854. **Helicoceras Mortoni,** (*Hall & Meek*) *Meek & Hayden.*	Dak.
855. **Helicoceras? tenuicostatum,** *Meek & Hayden.*	Dak.
856. **Helicoceras? nebrascensis,** *Meek & Hayden.*	Dak.
857. **Helicoceras ? umbilicatum,** *Meek & Hayden.*	Dak.
858. **Heteroceras Oweni,** *Meek.*	Ark.
859. **Heteroceras tortum,** (*Meek & Hayden*) *Meek.*	Dak.
860. **Heteroceras ? angulatum,** (*Meek & Hayden*) *Meek.*	Dak.
861. **Heteroceras ? cheyennensis,** (*Meek & Hayden*) *Meek.*	Dak.
862. **Turrilites attenuatus,** *Tuomey.*	Ala.
863. **Turrilites brazoensis,** *Roemer.*	Tex.
864. **Turrilites helicinus,** *Shumard.*	Tex.
865. **Turrilites spiniferus,** *Conr.*	Ala.
866. **Turrilites splendidus,** *Shumard.*	Tex.

Nautilidæ.

867. **Nautilus angulus,** *Tuomey.*	Ala.
868. **Nautilus Campbelli,** *Meek.*	Vanc. I.
869. **Nautilus DeKayi,** *Morton.*	N. J.; Del.; Ala.; Miss.; Ten.; Ark.; Tex.; Neb.; Id.; Brit. Am.
870. **Nautilus elegans,** *Sowerby?*	Tex.; Id.
871. **Nautilus elegans,** var. **nebrascensis,** *Meek & Hayden.*	Id.
872. **Nautilus Spillmani,** *Tuomey.*	Ala.
873. **Nautilus texanus,** *Shumard.*	Tex.
874. **? Aturia orbiculata,** (*Tuomey*) *Meek.*	Ala.

Order DIBRANCHIATA.

Belemnitidæ.

875 = **Belemnitella bulbosa**, *Meek & Hayden.*	Dak.
876 = **Belemnitella paxillosa**, (*Lamk.*) *Meek.*	N. J.; Del.; Miss.; Ala.; Tex., &c.

Teuthidæ.

877. **Phylloteuthis subovatus**, *Meek & Hayden.*	Dak.

SUBKINGDOM ARTICULATA.

CLASS ANNULATA.

Order TUBICOLA.

Serpulidæ.

878. **Hamulus major**, *Gabb.*	Ala.
879. **Hamulus onyx**, *Morton.*	Ala.
880. **Hamulus squamosus**, *Gabb.*	Ala.
881. **Serpula? tenuicarinata**, *Meek & Hayden.*	Dak.
882. **Serpula barbata**, *Morton.*	N. J.
883. **Spirulæa rotula**, (*Morton*) *Meek.*	N. J.

CLASS CRUSTACEA.

SUBCLASS ENTOMOSTRACA.

Order LOPHYROPODA.

Cytheridæ.

884. **Cytherina tippana**, *Conr.*	Miss.

SUBCLASS DECAPODA.

Order MACRURA.

Callianassidæ.

885. **Callianassa Danai**, *Hall & Meek.*	Dak.

CHECK LIST

OF THE

INVERTEBRATE FOSSILS OF NORTH AMERICA.

JURASSIC FORMATION.

BY

F. B. MEEK.

SUBKINGDOM **RADIATA.**

CLASS **ECHINODERMATA.**

Order **CRINOIDEA.**

Pentacrinidæ.

886. **Pentacrinus asteriscus,** *Meek & Hayden.* Dak.; Id.; Col.

SUBKINGDOM **MOLLUSCA.**

CLASS **BRACHIOPODA.**

Lingulidæ.

887. **Lingula brevirostra,** *Meek & Hayden.* Dak.

Rhynchonellidæ.

888. **Rhynchonella** ———— ? Dak.

CLASS **LAMELLIBRANCHIATA.**

Ostreidæ.

889. **Gryphæa calceola,** *Quenstedt?* Dak.; Id.

890. **Ostrea Engelmanni,** *Meek.* Dak.; Id.

Pectinidæ.

891. **Camptonectes bellistriatus**, *Meek.* Id.
892. **Camptonectes? extenuatus**, (*Meek & Hayden*) *Meek.* Dak.

Arcidæ.

893. **Grammatodon inornatus**, *Meek & Hayden.* Dak.

Trigoniidæ.

894. **Trigonia Conradi**, *Meek & Hayden.* Dak.

Pteriidæ.

895. **Eumicrotis curta**, (*Hall*) *Meek.* Dak.; Id.
896. **Pteris (Oxytoma) Munsteri**, (*Bronn?*) *Meek.*

Mytilidæ.

897. **Volsella pertenuis**, (*Meek & Hayden*) *Meek.* Id.
898. **Volsella formosa**, (*Meek & Hayden*) *Meek.* Id.

Astartidæ.

899. **Astarte fragilis**, *Meek & Hayden.* Dak.
900. **Astarte inornata**, *Meek & Hayden.* Dak.

Cardiidæ.

901. **Cardium (Protocardia?) Shumardi**, *Meek & Hayden.* Id.

Tancredidæ.

902. **Tancredia Warrenana**, *Meek & Hayden.* Id.
903. **Tancredia? æquilateralis**, *Meek & Hayden.* Id.

Anatinidæ.

904. **Pholadomya humilis**, *Meek & Hayden.* Id.
905. **Myacites subellipticus**, *Meek & Hayden.* Id.
906. **Myacites nebrascensis**, *Meek & Hayden.* Id.
907. **Myacites unionoides**, (*Roemer*) *Meek.* Russ. Am.
908. **Thracia? arcuata**, *Meek & Hayden.* Id.
909. **Thracia? sublævis**, *Meek & Hayden.* Id.

Class GASTEROPODA.

Subclass PULMONIFERA.

Order INOPERCULATA.

Limnæidæ.

910. **Planorbis veternus**, *Meek & Hayden.* Id.

SUBCLASS PROSOBRANCHIATA.

Order **CYCLOBRANCHIATA.**

911. **Dentalium subquadratum**, *Meek & Hayden.* Id.

Order **SCUTIBRANCHIATA.**

Neritidæ.

912. **Neritella nebrascensis**, *Meek & Hayden.* Id.

Order **PECTINIBRANCHIATA.**

Valvatidæ.

913. **Valvata scabrida**, *Meek & Hayden.* Id.

Viviparidæ.

914. **Lioplacodes veterna**, (*Meek & Hayden*) *Meek.* Id.

CLASS **CEPHALOPODA.**

Order **TETRABRANCHIATA.**

Ammonitidæ.

915. **Ammonites biplex**, *Sowerby?* Russ. Am.
916. **Ammonites cordiformis**, *Meek & Hayden.* Id.
917. **Ammonites Henryi**, *Meek & Hayden.* Id.
918. **Ammonites Wosnessenskii**, *Grewingk.* Russ. Am.

Order **DIBRANCHIATA.**

Belemnitidæ.

919. **Belemnites densus**, *Meek & Hayden.* Dak.; Id.
920. **Belemnites.** Russ. Am.

SUBKINGDOM **ARTICULATA.**

CLASS **ANNULATA.**

Order **TUBICOLA.**

Serpulidæ.

921. **Serpula** (ined.). Id.; Dak.

NOTES AND EXPLANATIONS.

(CRETACEOUS.)

3 = **Planularia cuneata**, Morton, Jour. Acad. Nat. Sci. VIII, 214, pl. xi, fig. 5.

4 = **Palmula sagittaria**, Lea, Am. Phil. Soc. 1833, Contrib. Geol. pl vi, p. 218. Dr. Carpenter unites *Cristellaria*, *Flabellina*, *Dentalina*, *Nodosaria*, &c. as members of a single genus, for which he uses the name *Nodosarina*. It may be at least convenient however, to retain these names in a subgeneric sense; but, in either case, we should think Montfort's older name *Phonemus*, should stand for the entire group.

6 and 7 — I have not been able to find by whom these two species were described, but believe it was by Ehrenburg.

8 = **Orbitulites texanus**, Roemer, Kreid. Von. Tex. 86.

12 = **Grammostomum phyllodes**, Ehrenburg.

168 = **Plagiostoma echinatum**, Morton, Synop. Org. Rem. (Add. Obs.) 1835.—3 = **Spondylus capax**, Conrad, Jour. Acad. Nat. Sci. II, sec. ser. 1850, 274, xxiv, 8.

171 = **Ctenoides acutilineata**, Conrad, Jour. Acad. Nat. Sci. sec. ser. III, 329, xxiv, 2.

173 = **Ctenoides denticulata**, Gabb, Proc. Acad. Nat. Sci. Oct. 1861, 327.

175 = **Plagiostoma pelagicum**, Morton, Synop. Org. Rem. 1834, 61, v, 2.

177 = **Ctenoides squarrosa**, Gabb, Proc. Acad. Nat. Sci. Nov. 1860, 366.

195 = **SYNCYCLONEMA**, Meek. Type **Pecten rigida**, Hall & Meek, Mem. Am. Acad. Arts and Sci. Boston, V, new ser. 381, ii, 4, *a*, *b*, *c* (not Sowerby, 1818). The type of this group is a very small, nearly equivalve, ovate-suborbicular, compressed shell, with small, flat, slightly unequal ears, and closed margins. Hinge short; surface with fine, obscure concentric striæ, and sometimes on the right valve, small rounded concentric ridges.

Some of the larger smooth Cretaceous and Jurassic species may possibly also belong to this group. None of the so-called *Pectens*, of the Cretaceous or older rocks, belong properly to the genus *Pecten*, Müller, as typified by the recent *P. maximus*, Linn.

201 = **Leda bisulcata**, Meek & Hayden, Proc. Acad. Nat. Sci. Phila. Dec. 1861, 440.

202 = **Leda longifrons**, Conrad, Jour. Acad. Nat. Sci. sec. ser. IV, 281, xlvi, 18.

203 = **Leda pinnæformis**, Gabb, ib. 303, xlviii, 22.

204 = **Leda protexta**, Gabb, ib. 23.

205 = **Leda Slackiana**, Gabb, ib. 397, lxviii, 36.

206 = **Leda subangulata**, Gabb, Synop. Mol. Cret. 1861, 133.

263 = **Avicula abrupta**, Conrad, Jour. Acad. Nat. Sci. sec. ser. II, 274, v, 6.

264 = **Avicula convexo-plana**, Roemer, Kreid. Von. Tex. 1852, 61, vii, 9.

265 = **Avicula cretacea**, Conrad, Nicollett's Report, 1845, 169.

266 = **Avicula Haydeni**, Hall & Meek, Mem. Am. Acad. Arts and Sci. sec. ser. V, 382, 1–5.

267 = **Avicula iridescens**, Shumard, Proc. Boston Soc. Nat. Hist. Sept. 1861.

268 = **Avicula laripes**, Morton, Synop. Org. Rem. 1834, 63, xvii, 5.

269 = **Avicula linguiformis**, Evans & Shumard, Proc. Acad. Nat. Sci. Phila. 1855, 163.

270 = **Avicula nebrascana**, Evans & Shumard, Trans. St. Louis Acad. I, 38.

271 = **Avicula pedernalis**, Roemer, Kreid. Von. Tex. 1852, 62, viii, 1.

272 = **Avicula petrosa**, Conrad, Jour. Acad. Nat. Sci. sec. ser. II, 174, xxiv, 15.

273 = **Avicula planisulca**, Roemer, Kreid. Von. Tex. 1852, 62, vii, 7.

274 = **Avicula subgibbosa**, Meek & Hayden, Proc. Acad. Nat. Sci. Phila. 1860, 180.

275 = **Avicula triangularis**, Evans & Shumard, ib. 1855, 163.

320 = **ACTINOCERAMUS**, Meek. Type **Inoceramus sulcatus**, Parkinson, Geol. Tr. V, 59. This name is proposed for a small section of *Inocerami*, with a short hinge, and radiating plications or costæ.

324 — This and the following species, placed in the catalogue under the name *Modiola*, belong to *Volsella*, Scopoli, 1777, and should be called *Volsella attenuata*, *V. concentrico-costellata*, &c. They also belong to *Perna*, Adanson, 1757, if his genus should be adopted with the first species as its type.

336 = **Modiola granulato-cancellata**, Roemer, Kreid. Von. Tex. 1852, 54, vii, 12.

377 = **LIOPISTHA**, Meek. Type **Cardium elegantulum**, Roemer, Kreid. Von. Tex. 1852, 48, 5.

The shells embraced in this group, which seems to be peculiar to the Cretaceous system, have, according to Mr. Conrad, the hinge of *Papyridea*, Swainson. They differ, however, from the type of that genus (*Cardium bullatum*, Linn.) in being closed and without costæ on the postero-dorsal region, or crenulations in the posterior margins of the valves. They are also much thinner shells.

380 = **Corbula** (sp. ined.), Owen, Second Rept. Geol. Survey Arkansas, pl. viii, fig. 1.

381 = **Cardium? sancti-sabæ**, Roemer, Kreid. Von. Tex. 1852, 48, vi, 7.
This is not a true *Papyridea*, and it is very doubtful whether it can go into the group *Liopistha*.

404 — The genus *Tancredia* differs so materially from the *Cardiidæ*, *Lucinidæ*, *Isocardiidæ*, &c., to which it has been respectively referred, that we are probably less liable to err in keeping it separate as the type of a distinct family.

405 = **Cyprina arenaria**, Meek & Hayden, Proc. Acad. Nat. Sci. May 1857, 143.

409 = **Cyprina humilis**, Meek & Hayden, ib. May 1860, 179.
The name *Cyprinidæ*, having been in use for a family of fishes, since 1831, cannot be retained for this family; I would, therefore, propose to call it *Veniliidæ*.

410 = **Venilia quadrata**, Gabb, Proc. Acad. Nat. Sci. Nov. 1861, 364 (not *Cyprina quadrata*, D'Orbigny, 1843, which is a true *Venilia*).

412 = **Cyprina subtumida**, Meek & Hayden, Proc. Acad. Nat. Sci. May 1857, 144.

416 = **Cyprina Laphami**, Shumard, Proc. Bost. Soc. Nat. Hist. Sept. 1861.

417 = **Venus? circularis**, Meek & Hayden, ib. Nov. 1856, 27.

425 = **Callista eufalensis**, Conrad, Jour. Acad. sec. ser. IV, 285, xlvi, 24.

426 = **Cytherea Deweyi**, Meek & Hayden, Proc. Acad. Nat. Sci. April 1856, 83.

427 = **Cytherea leonensis**, Conrad, Mex. Bound. Rept. I, part 2, 1858, 153, vi, 1. (Wrongly printed *lenonensis* on p. 13 of the List.)

428 = **Cytherea lamarensis**, Shumard, Trans. St. Louis Acad. Sci. I, p. 600.

429 = **Cytherea missouriana**, Morton, Jour. Acad. Nat. Sci. sec. ser. VIII, 120, ii, 2.

430 = **Cytherea nebrascensis**, Meek & Hayden, Proc. Acad. Nat. Sci. April 1856, 83.

431 = **Cytherea orbiculata**, Hall & Meek, Mem. Am. Acad. V, new ser. I, fig. 7.

432 = **Cytherea Owenana**, Meek & Hayden, Proc. Acad. Nat. Sci. VIII, 273.

433 = **Cytherea pellucida**, Meek & Hayden, Ib. Nov. 1856, 278.

434 = **Cytherea texana**, Conrad, Mex. Bound. Rept. I, part 2, 1858, 153, vi, 2.

435 = **Cytherea tippana**, Conrad, Jour. Acad. Nat. Sci. VIII, sec. ser. 326, xxxiv, 18.

436 = **Venus Meekiana**, Gabb, Ib. IV, 394, lxviii, 23.

437 = **Venus ripleyana**, Gabb, Ib. 393, lxviii, 22.

438 = **Cytherea tenuis**, Hall & Meek, Mem. Am. Acad. Arts and Sci. V, new ser. 383, i, 5.

440 = **Tellina formosa**, Meek & Hayden, Proc. Acad. Nat. Sci. May 1860, 179.

454 = **Solen irradians**, Roemer, Kreid. Von. Tex. 1852, 54, vi, 9.

455 = **Psammobia cancellato-sculpta**, Roemer, ib. 46, vi, 10.

473 = **CYMELLA**, Meek. Type **Pholadomya undata**, Meek & Hayden, Proc. Acad. April 1856, 81.

Shell small, subequilateral, ovate, with numerous regular, well-defined concentric undulations, crossed on the middle of the valves by a few radiating impressed lines, not marked in the depressions between the ridges.

480 = **Leda fibrosa**, Evans & Shumard, Trans. St. Louis Acad. 1857, 39.

509 — Not being acquainted with the hinge and interior of this genus, I placed it with doubt in the family *Saxicavidæ*. Since the catalogue was stereotyped, I have been informed by Prof. Agassiz, that he has specimens showing it to possess the internal characters of the *Mytilidæ*.

526 = **GONIOCHASMA**, Meek. Type **Xylophaga Stimpsoni**, Meek & Hayden, Proc. Acad. Phila. May 1857, 141.

Differs from *Martesia* in having no accessory dorsal pieces, and in having the anterior hiatus formed by a rectangular notch in the antero-ventral margin of each valve.

527 = **XYLOPHAGELLA**, Meek. Type **Xylophaga elegantula**, Meek & Hayden, Proc. Acad. Phila. 1857, 141.

Has the form and ornamentation of *Xylophaga*, but internal casts show the impression of an oblique, internal postero-dorsal ridge not seen in that genus. Burrows apparently always without a shelly lining.

542 = **Ringicula pulchella**, Shumard, Proc. Boston Soc. Nat. Hist. Sept. 1861.

Since the publication of a paper on the *Actæonidæ*, in the Am. Jour. Sci. vol. XXXV, p. 84, I have, through the kindness of Dr. Stimpson, had an opportunity to examine a drawing of the animal of a recent *Ringicula* (*R. arctata*, Gould), made by him from a living specimen taken on the coast of China. From this drawing, and his notes, it appears that it has a large well-developed siphon, which lies (perhaps when the creature moves) folded back upon the body whorl between two short, unequal tentacular lobes? From this fact, and the general dissimilarity of the animal to any of the known types of the *Actæonidæ*, I can scarcely doubt the propriety of regarding this genus as the type of a distinct family, which will probably include the extinct groups *Ringinella, Cinulia, Avellana, Euptycha* and *Aptycha*.

544 = **Actæonina naticoidea**, Gabb, Jour. Acad. Nat. Sci. IV, sec. ser. 293.

545 = **Ringicula subpellucida**, Shumard, Proc. Bost. Soc. Nat. Hist. Sept. 1861, 192.

546 = **Ringicula acutispira**, Shumard, ib. 193.

548 = **Actæonina biplicata**, Gabb, Proc. Acad. Nat. Sci. Phila. March 1860, 93.

572 = **Scalpellum inequicostatum**, Shumard, Proceed. Bost. Soc. Nat. Hist. 1861, 199.

Scalpellum, Leach, being a genus of *Crustacea*, it was perhaps by some oversight in copying manuscript that this species was described under that name.

577 = **Capulus occidentalis**, Hall & Meek, Mem. Am. Acad. Arts and Sci. V, new ser. 1856, 385.

583 = **Phasianella Haleana**, D'Orbigny, Prodr. de Pal. II, 1850, 224.

584 = **Phasianella perovata**, Shumard, Trans. St. Louis Acad. I, 597.

585 = **Phasianella punctata**, Gabb, Jour. Acad. Nat. Sci. Phila. IV, sec. ser. 299.

588 = **Architectonica Abbotti**, Gabb, Proc. Acad. Nat. Sci. Oct. 1861, 321.

590 = **Solarium abyssinus**, Gabb, ib. March 1860, 94.

580 — Not *Delphinula*, Lamk.

581 and 582 — *Straparollus* of Montfort does not occur in the Cretaceous or more recent rocks.

592 = **Nerita (Nereis) densata**, Conrad, Jour. Acad. new ser. IV, 288, xlvi, 57.

593 = **Natica ambigua**, Meek & Hayden, Proc. Acad. Nat. Sci. March 1856, 64.

594 = **Natica Tuomeyana**, Meek & Hayden, ib. Nov. 1856, 270.

615 = **SPIRONEMA**, Meek. Type **Turbo tenuilineata**, Meek & Hayden, Proc. Acad. Nat. Sci. Phila. March 1856, 64.

Shell ovate; whorls rounded, and separated by a rather deep suture; aperture ovate, lip thin, continuous; columella not thickened; perforated by a very small umbilicus; surface with revolving lines and furrows. The non-perlaceous texture of the interior layer, as well as the other characters of such Cretaceous shells, remove them from the *Trochidæ*.

616 = **Tuba? bella**, Conrad, Jour. Acad. Nat. Sci. IV, 289, xlvi, 38.

624 = **Rostellaria biangulata**, Meek & Hayden, Proc. Acad. Nat. Sci. 1856, 65.

625 = **Aporrhais parva**, Meek & Hayden, ib. May 1860, 178.

626 = **Aporrhais sublævis**, Meek & Hayden, ib.

627 = **DREPANOCHEILUS**, Meek. Type **Rostellaria americana**, Evans & Shumard, Proc. Acad. Nat. Sci. Phila. 1860, 423.

Shell like *Aporrhais*, but without a posterior canal extending up the spire, and having the lip produced into a single, usually scythe-shaped projection. This type, as well as the including genus *Anchura*, differ from the Jurassic genus *Alaria*, in never having the labial appendage developed during the growth of the shell, so as to be left behind the aperture as projecting spines on the body whorl or spire. It, however, probably includes some of the so-called *Alaria*.

628 = **Aporrhais decemlirata**, Conrad, Jour. Acad. Nat. Sci. Phila. sec. ser. iii, 330, xxxiv, 11.

629 = **Rostellaria nebrascensis**, Evans & Shumard, Proc. Acad. Aug. 1856, 164.

630 = **Rostellaria rostrata**, Gabb, Jour. Acad. Nat. Sci. IV, 390, lxviii, 7.

643 = **ISOPLEURA**, Meek. Type **Rimella curvilirata**, Conrad, Jour. Acad. Nat. Sci. iii, new series, 1858, 331.

I cannot think this and the succeeding species congeneric with *Rimella rimosa*, Sowerby, the type of Prof. Agassiz's genus *Rimella*.

644 = **Chemnitzia Meekiana**, Gabb, Jour. Acad. Nat Sci. IV, 1860, 299.

646 = **PTEROCERELLA**, Meek. Type **Harpago tippana**. Jour. Acad. Nat. Sci. iii, sec. ser. 331, xxxv, 25.

Shell small, thin; whorls few, rounded, smooth or subangulated; last one not much enlarged. Lip greatly extended, and ascending the spire, trilobate—the middle lobe much larger and more produced than the others, carinated on the outer side.

I cannot believe such shells as this should be placed in the same genus with *Strombus chiragra* and *S. lambis*, Linnæus, the types of *Harpago* and *Pterocera*; nor is it probable that *any* of our Cretaceous or older species, usually referred to *Pterocera*, really belong to that genus as properly restricted. This type should probably be placed in the *Aporrhaidæ*, on p. 19 of the List, instead of in the *Strombidæ*.

651 = **CHEMNITZIA**, Conrad, 1860 (not D'Orbigny, 1839). Mr. Conrad proposes to retain this name for a group of Cretaceous shells which he ranges as a subgenus under *Turbonilla*, Risso. He does not say which species he regards as the type of the group, though his description was evidently written from his *C. laqueata* and *C. melanopsis;* consequently I have regarded these as typical, and the others as doubtful forms.

658 = **Scalaria texana**, Roemer, Kreid. Von. Tex. 1852, IV, fig. 11, *a*, *b*.

662 = **Scalaria Forshayii**, Shumard, Proc. Bost. Soc. Nat. Hist. Sept. 1861, 195.

668 = **Natica acutispira**, Shumard, Trans. St. Louis Acad. I, 597.

689 = **Volutilithes bella**, Gabb, Jour. Acad. Nat. Sci. IV, sec. ser. 300, xlviii, 7.

690 = **Volutilithes biplicata**, Gabb, ib. 6.

691 = **Volutilithes Conradi**, Gabb, ib. 10.

692 = **Volutilithes nasuta**, Gabb, ib. 9.

713 = **TRACHYTRITON**, Meek. Type **Fusus? vinculum**, Hall & Meek, Mem. Am. Acad. Arts and Sci. V, new ser. 39, iii, 5, *a*, *b*.

Shell subfusiform or bucciniform, rather thin; canal moderate, nearly straight; columella smooth; outer lip sharp excepting at intervals, when it becomes thickened and crenate within. Surface without distinct varices, roughened or cancellated by small, regular, revolving bands, crossing small, equidistant longitudinal costæ.

Seems to be nearly related to the recent *Triton cancellatum*, Lamk., and *T. oregonensis*, Redfield, usually referred to *Argobuccinum* or *Lagena*, Klein; though they appear sufficiently distinct from Klein's types, even if his genera could be regarded as regularly established.

721 = **Pleurotomaria texana**, Shumard, Proc. Bost. Soc. Nat. Hist. Sept. 1861, 197.

723 = **PIESTOCHILUS**, Meek. Type **Fusus Scarboroughi**, Meek & Hayden, Proc. Acad. Nat. Sci. Phila. May 1857, p. 139.

Differs from the typical species of *Clavellithes* in having the aperture acutely angular behind (in consequence of the outer lip being closely appressed to the body whorl above), instead of forming a kind of posterior canal; and in having the inner lip thin instead of thickened above.

Includes the Eocene *Clavella vicksburgensis*, Conrad, Jour. Acad. Nat. Sci. sec. ser. II, pl. i, fig. 5. As Swainson neither figured, described, nor referred to any known species in publishing his name *Clavella*, it cannot be retained.

724 = **Fusus Vaughani**, Meek & Hayden, Proc. Acad. Nat. Sci. May 1857, 139.

This is not a true *Cantharis*, as has been determined since the List was in type. It may remain under that name, however, until its affinities can be determined from the examination of better specimens.

726 = **Fusus? flexicostatus**, Meek & Hayden, ib. 1856, 66.

727 = **Fusus? Haleanus**, D'Orbigny, Prodrome de Pal. II, 1850, 228.

728 = **Neptunea impressa**, Gabb, Jour. Acad. IV, new ser. 389, lxviii, 5.

729 = **Fusus intertextus**, Meek & Hayden, Proc. Acad. Nat. Sci. Phila. May 1857, 139.

730 = **Fusus Newberryi**, Meek & Hayden, Proc. Acad. Nat. Sci. May 1857, 66.

I have long suspected that this shell, and others from the Upper Missouri, are not generically distinct from *Pyrifusus*; but was left in doubt because that genus was described as having a broad, thick, flattened columella. On sending a specimen of this species to Mr. Conrad for comparison, he writes that he now thinks the columella of his typical specimen was flattened by pressure, and that our shell probably belongs to the same genus. I have, therefore, referred this and several other species to *Pyrifusus*. Should it be found, however, when better specimens can be examined, that the type of that genus really has a broad, flattened columella, and consequently that our shells belong to a distinct genus, I would propose for this group the name *Neptunella*, with *Fusus Newberryi*, Meek & Hayden, as its type. It would also include *F. intertextus* and *F. subturritus*, M. & H.; *Afer bellalirata*, Conrad; and *F. mullicaensis*, Gabb. These forms cannot be referred to *Afer*, Conrad, because that group was founded upon the recent *Fusus afer*, of Lamarck, a very distinct type.

It is not probable that *any* of the species retained under the name *Fusus*, in the foregoing List, belong to that genus as properly restricted. It is, however, probably better to leave them there, until Conchologists have agreed in regard to what particular type of that heterogeneous group the name *Fusus* is to be applied.

732 = **Fusus subturritus**, Meek & Hayden, ib.

734 = **Fusus ? tenuilineatus**, Hall & Meek, Mem. Am. Acad. Arts and Sci. V, new ser. 394, ill, 9.

740 = **Pleurotomaria mullicaensis**, Gabb, Proc. Acad. Nat. Sci. March 1860, p. 95. Should be *Pyrifusus milicaensis*, (Gabb) Meek.

748 = **Pyrula Bairdi**, Meek & Hayden, Proc. Acad. Nat. Sci. March 1856, 86.

751 = **Fusus ? dakotensis**, Meek & Hayden, ib. 65.

770 = **Hamites Leai**, Troost, Fifth Rept. Geol. Surv. Tennessee, 1840, 53.

773 = **Hamites Verneuilii**, Troost, ib. 52.

858 = **Turrilites (sp. ined.)**, Owen, Second Report Geol. Recon. Arkansas, pl. viii, 2.

859 = **Helicoceras tortum**, Meek & Hayden, Proc. Acad. Nat. Sci. Phila. March 1858, 54.

880 = **Helicoceras ? angulatum**, Meek & Hayden, ib. May 188 , 176.

881 = **Turrilites cheyennensis**, Meek & Hayden, ib. Nov. 1856, 280.

874 = **Nautilus orbiculatus**, Tuomey, ib. 1855, 167.

This should probably be written *Aganides orbiculatus*, since Montfort's name *Aganides* (1808) was founded apparently upon a species of this group.

878 = **Belemnites paxillosa**, Lamk. 1801, Syst. 104.

883 = **Vermetus rotula**, Morton, Synop. Org. Rem. 1834, 81, i, 14.

NOTES AND EXPLANATIONS.

(JURASSIC.)

891 = **CAMPTONECTES**, Agassiz MSS. Example **Pecten lens**, Sowerby. Also includes *Pecten bellistriatus*, Meek, Proc. Acad. Nat. Sci. July, 1860, 311.

The name *Camptonectes* has been adopted by Prof. Agassiz for a group of Jurassic and Cretaceous species, several of which have been confounded under the name *Pecten lens*. These shells are subequivalve, compressed, lenticular, and closed all around. They have generally small compressed ears, and a short edentulous hinge; byssal sinus under the anterior ear of right valve deep, well defined. Surface ornamented with fine, very regular, closely arranged, often sub-punctate, radiating or sub-divaricate striæ, which curve gracefully outwards on each side.

This genus is known to be represented by at least one undescribed species in the Cretaceous beds of New Jersey. It will include a few species, such as *Pecten cottaldinus*, D'Orbigny, upon which the radiating striæ are nearly or quite obsolete.

892 = **Pecten extenuatus**, Meek & Hayden, Proc. Acad. Nat. Sci. May 1860, 184.

895 = **Avicula? curta**, Hall, Stansbury's Rept. Exped. to Great Salt Lake, 1852, 412. See Am. Jour. Sci. March, 1864, 212.

896 = **OXYTOMA**, Meek. Type **Avicula Munsteri**, Bronn, Leh. Zeitsch. 1829, 76.

The shells of this group differ from the living typical *Pteria* (= *Avicula*), in having a much more deeply and sharply defined byssal sinus. They are also less oblique, more distinctly inequivalve, and usually more strongly costate, particularly on the left valve, around the pallial margins of which the costæ sometimes terminate in projecting spines. This type forms a transition from the true *Pteria* to *Eumicrotis*.

Includes *Avicula costata*, Morris & Lycett; *A. digitato*, and apparently *Monotis interlævigata*, Quenstedt, and *A. cygnipes*, Phillips. Mainly, if not entirely, confined to the Jurassic rocks.

897 = **Modiola pertenuis,** Meek & Hayden, Proc. Acad. Nat. Sci. March 1858, 51.

898 = **Modiola (Perna) formosa,** Meek & Hayden, ib. Dec. 1861, 439. The names of these two shells should be written *Perna pertenuis*, and *P. formosa*, if Scopoli's name *Volsella* is not adopted.

907 = **Venus unionides,** Roemer, Ool. I, 109, tab. 8, fig. 6. This and the two preceding species (904 and 905) belong to the genus *Pleuromya*, which name must be adopted if *Myacites*, Schlot., as affirmed by Bronn and Goldf., is not to be retained.

910 — This, and 911, 912, and 913, are only placed provisionally in the Jurassic list.

912 — Should be written *Neritina nebrascensis*, if Humphrey's name *Neritella* is not to be adopted.

914 = **LIOPLACODES,** Meek. Type **Melania (Potadoma) veterna,** Meek & Hayden, Proc. Acad. Nat. Sci. Phila. Dec. 1861, 444.

Differs from the type of *Lioplax*, Troschel, in its more elongated form, smaller body whorl, more constricted suture, and particularly in having the posterior extremity of the aperture angular instead of rounded, owing to the oblique flattening of the upper side of the body whorl.

From the types usually included in *Melania*, it differs in having the columella perforated by a small umbilical opening, and the peritreme continuous.